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15MEA306/406

Third/Fourth Semester B.E. Degree Examination, June/July 2019

(ME/MA)

COMPUTER AIDED MACHINE DRAWING

Time: 3 Hours

Max. Marks: 80

- Note:**
1. Answer any ONE question from each of the parts A, B and C.
 2. Use **FIRST ANGLE** projection only.
 3. Missing data if any may suitably be assumed.
 4. All the calculations should be on answer sheet supplied.
 5. All the dimensions are in mm.
 6. **Part C Assembled View should be in 3D and other 2 views in 2D.**

PART - A

- Q.No.1** Figure.1 shows a machine component Draw the following views.
a) Front View b) Top view

(15 Marks)

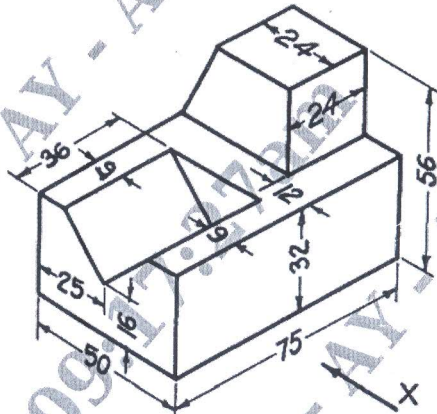


Figure 1.

- Q.No.2** Draw the two views of Square Headed Bolt M25 x 100 and a thread length of 60 mm, with a Square nut Indicate all the proportions and actual dimensions.

(15 Marks)

PART - B

- Q.No.3** Draw sectional FV & TV of the double riveted Lap joint, with Zig-Zag riveting taking thickness $t = 9$ mm. Indicate dimensions. (Minimum three rows). **(15 Marks)**
- Q.No.4** Draw the following views of a 'Universal Coupling' used to connect two 20 mm diameter shafts. a) Sectional Front View b) Profile View. **(15 Marks)**

PART - C

- Q.No.5** Details of "MACHINE VICE" is shown in following Figure 2. Assemble the parts and draw the following views. (a) Sectional Front View (b) Top view. **(50 Marks)**

Q.No.6 Details of "RAMS BOTTOM SAFETY VALVE". is shown in following Figure 3. Assemble the parts and draw the following views.
 a. Front View b. Top View. (50 Marks)

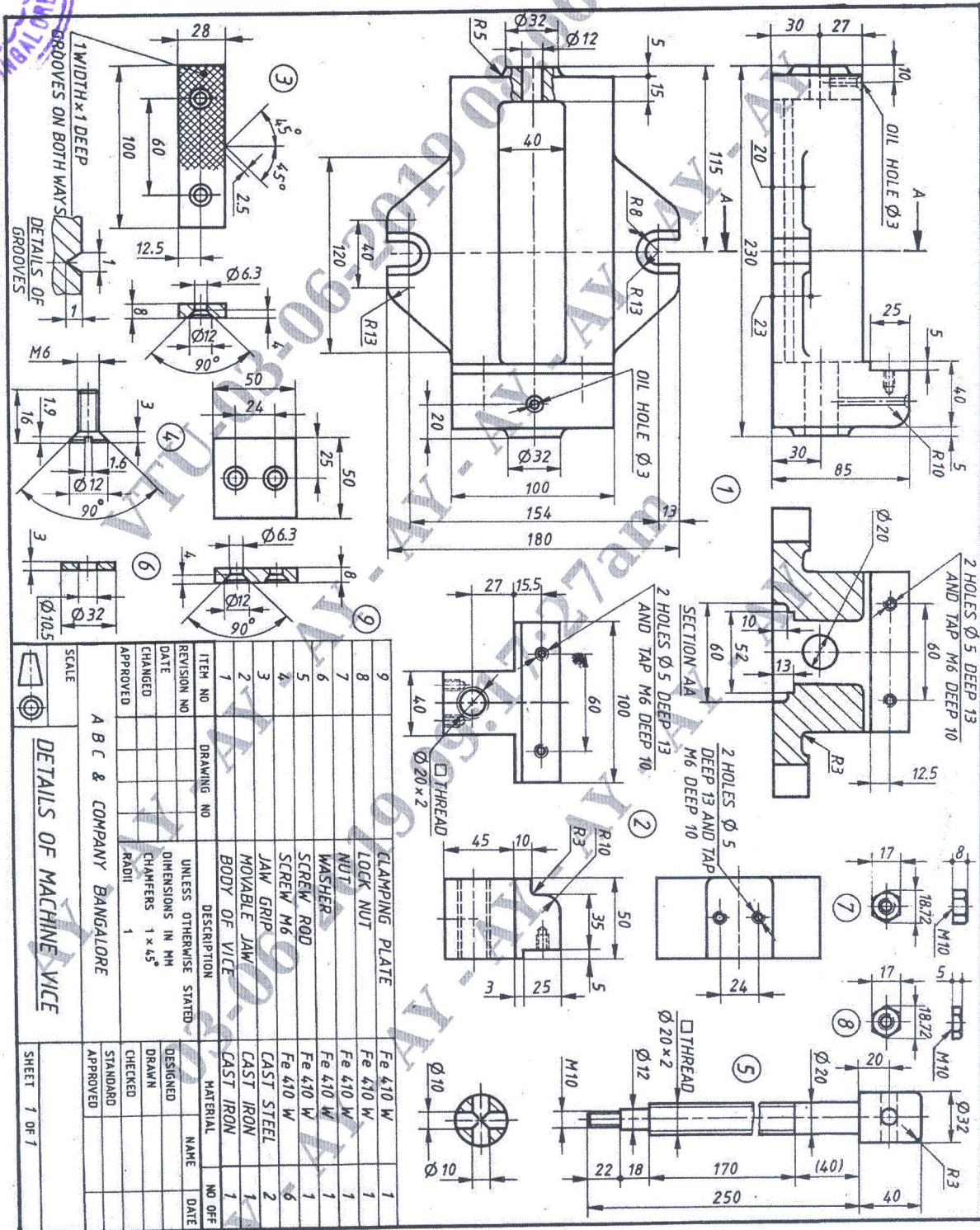


Figure 2 "MACHINE VICE"

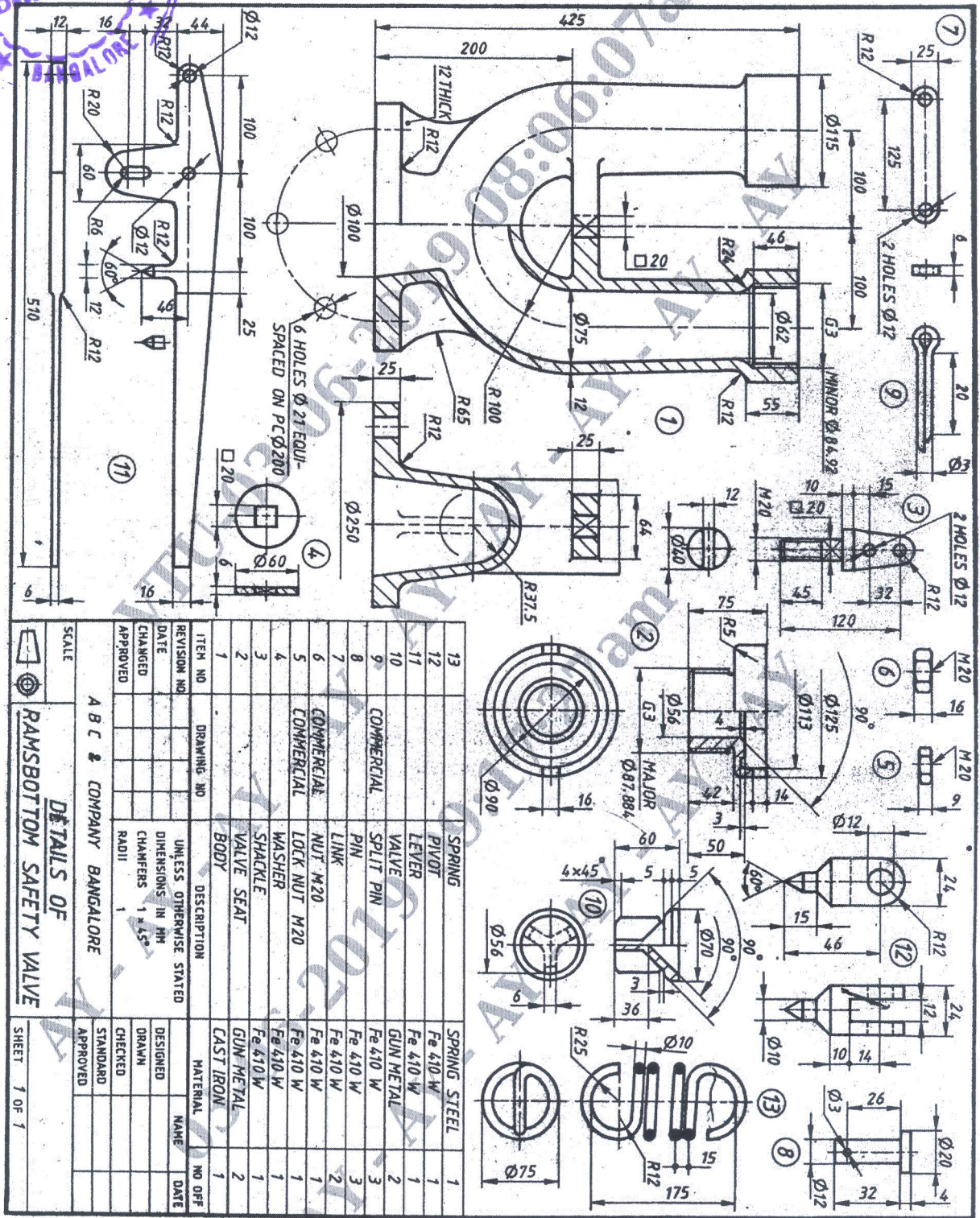
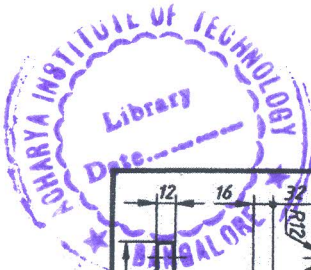


Figure 3. "RAMS BOTTOM SAFETY VALVE"